1:Redfield E-5 (1926-1927)1930
NU37 Tepoztlan NU37

orous defense of Tepoztlán by Tepoztecatl against the attacks of neighboring *pueblos*. These tales and this ritual are but dim echoes of ancient memories, although they constitute an important part of the more ancient lore; they lie upon the margins of attention in the Tepoztlán of today.

A document apparently written in 1580[1] gives some information as to Tepoztlán before and just after the Conquest. The inhabitants sold in neighboring *pueblos* the wood that abounded on their hillsides and the lime to be found in their territory. Their principal industry was the making of paper of fiber obtained from a tree. The name of this commodity (*amatl*) survives today in the name of one of the villages in the valley (Amatlan), and the grooved-stone pulp-beaters used in the ancient industry are among the commonest of pre-Columbian artifacts to be encountered in the valley.

The Spaniard first entered Tepoztlán in 1521. In that year, the same which saw the subjugation of Tenochtitlan, Cortés passed through Tepoztlán on his way to Cuernavaca from Yautepec. "There we found many pretty women and much loot," says Bernal Díaz del Castillo. As certain Yautepec chieftains there seeking refuge would not give themselves up, the Spaniards set fire to half the town.[2] Later, Tepoztlán

[1] The "Relación de Tepoztlán," published by Francisco Plancarte in the *Boletín oficial y revista eclesiastica del obispado de Cuernavaca*, X, 313–17, 326–31, and 348–52, and cited in Miguel Salinas, art., "La Sierra de Tepoztlán," pp. 362 ff.

[2] Bernal Díaz del Castillo, *The Conquest of New Spain*, Book X, chap. cxliv (IV, 67, of the Hakluyt translation).

2;Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

To a lesser degree the election of federal senator and deputies also touches the Tepoztecan population. On these occasions politicians from the capital come to the village to electioneer and to organize sympathizers for their candidates. However, the intervention of the governor of the state is much more direct in these elections, and so Tepoztecans tend to view them as state or regional elections. On the whole, the younger generation participates very little in politics, since this is a matter for the older men.

Some indication of the Tepoztecan sense of belonging to the Mexican nation may be gathered from their reaction to the question of Mexico's participation in World War II. Most Tepoztecans were opposed to Mexican entrance into the war on the side of the democracies. Under the influence of Sinarquist propaganda, sympathy with the Axis powers developed in the village. Rumors began to circulate that Zapata was not really dead but was fighting with Hitler, and that that explained why the Germans were winning so many victories. The latent and widespread anti-U.S.A. sentiment was encouraged by rumors that the Mexicans were being asked to fight to save the gringos. Nevertheless, the Tepoztecans accepted the Mexican declaration of war as one of those decisions of the omnipotent federal government, about which nothing can be done. This Tepoztecan attitude of passivity was typical of the attitude of most Mexicans toward the war.

Since the Revolution the state of Morelos has developed an intense political life that has reached into Tepoztlán. After the thirties, constitutional government was instituted and the governor and local officials were elected, rather than imposed. Political campaigns and electioneering became important; and Tepoztlán, because of its proximity to the state capital, received much attention from prospective candidates. In the attempt to get votes, speakers appealed to state loyalty with such slogans as, "First the Morelenses and then the Mexicans," and made typical demagogic preelection speeches. A good number of Tepoztecans show enthusiasm and interest in state politics, and several hundred men generally turn out to hear the speeches. The election of a new governor always means the possibility of some advantage to the village, or at least to a few Tepoztecans who have actively supported him.

ECONOMIC FACTORS

The Tepoztecan economy is not self-sufficient, and is an integral part of the larger national economy. Tepoztlán exports corn, charcoal, and plums to Mexico City, and in turn imports manufactured goods and some foods. Trading relations involve contacts with individuals in the big city, and occasionally Tepoztecans go directly to Mexico City to make purchases. Since the construction of the road, trade and economic contacts with Mexico City have been much more frequent. The tourist trade has also made for increased contacts with outsiders.

Trade between Tepoztlán and other towns in the state of Morelos develops knowledge of the region and its peoples. Tepoztlán carries on most of its trade with Cuernavaca and Yautepec, but also with smaller towns and villages in the state.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

[p80]

4 *economics: general aspect and historical background:*

433 THE CONTEMPORARY economy of Tepoztlán is essentially a household economy of small producers, peasants, artisans, and merchants, whose primary motive for production is subsistence. But it is not a self-sufficient economy and probably was not even in pre-Conquest days. The Tepoztecan economy today forms part of the larger national economy of Mexico and, to a more limited degree, of the world [435] economy. The price of corn, the most important local product, is as much determined by international markets as by local conditions of supply and demand. [439] Tepoztlán depends heavily on trade with the outside for basic elements of diet, such as salt, sugar, and chile, which are obtained from nearby regions, and for sewing machines, patent medicines, pool tables, water pipes, steel plows, and buses which are obtained from more distant urban centers. Tepoztlán has few handi- [438] crafts, there is no pottery, no weaving, no basketmaking. Household utensils, cloth, baskets, and many other items are obtained by purchase.

From the point of view of agriculture, the basic source of livelihood, the resources of Tepoztlán are poor indeed. As we have seen, only about fifteen per cent of the total land area of the municipio is cultivable by plow and oxen. Furthermore, there is no irrigation, which means only one harvest a year. The village could not support itself by farming alone. Tepoztecans therefore seek other sources of in- [434] come, and are busy doing a variety of jobs during different parts of the year. Some work on nearby plantations, others engage in trade, make rope, produce charcoal, raise livestock, or have some other part-time activity. But with all of this the fundamental problem for most Tepoztecans is that of subsistence.

The Tepoztecan economy, though that of a peasant society, is neither simple nor primitive. It has many qualities well known to the student of rural society in western civilization. Among the more important are well-developed concepts of private property; a high degree of individualism; a free market; the definition of wealth in terms of land, cattle, and other forms of property; a relatively wide range in wealth differences; the use of money; a highly developed system of marketing and trade, interest on capital, work for wages, pawning of property, renting of land, and the use of plow-oxen; and specialization in part-time occupations.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

433 But despite this roster of familiar traits, the Tepoztecan economic system is quite distinctive and defies easy classification in terms of our traditional categories, such as capitalistic or feudal. For side by side with the above traits are less familiar ones such as communal land-ownership, collective labor, hoe culture, production primarily for subsistence, barter, the absence of credit institutions, the lack of capital, the fear of displaying wealth, and the continued importance of religion and ritual in economic pursuits.

174 433 A complicating factor, and in terms of our own society a differentiating one, is that the Tepoztecan economy and technology represent a fusion of elements from three distinct historical levels: the pre-Hispanic, the Spanish colonial, and the modern western European. Furthermore, it is not always possible to ascertain with assurance which trait belongs to which level. While some traits are found in both the pre-Hispanic and post-Conquest periods, the function and meaning of the trait would seem to have been so different in the total economies of these distinct periods that equating the two is hardly justified. For example, while private property in land may have existed before the Conquest, it is questionable whether it was widespread or played the same role in the total economy and in the aspirations of the people that it does today. And though wealth differences undoubtedly existed at that time, the criteria of wealth as well as its distribution were probably very different from the present. Also, while the market system is probably pre-Hispanic there is a world of difference between the present-day market, which reflects international price changes, and the more localized pre-Hispanic markets.

PRE-CONQUEST AND SPANISH-COLONIAL ECONOMY

172 433 Specific data on the pre-Conquest economics of Tepoztlán are quite limited. The archeological evidence indicates the presence of potsherds from distant areas of Mexico and would therefore suggest wide trading contacts.

Archaeological research carried out in Tepoztlán in 1942-43 by Miss Florencia Muller revealed six ceramic levels and indicated similarities in ceramics with southern Morelos, Vera Cruz, Teotihuacan, Monte Alban, and points even farther south.[1]

175 433 The *Relación* suggests that Tepoztlán was a stratified society of nobles and commoners, not unlike Aztec society, with class differences affecting diet, clothing, marriage customs, and other aspects of life. It also contains scattered references which give us some idea of local foods, industries, and other economic pursuits. The following excerpts contain the pertinent data.

> . . . and they had wars with those of the town of *Capihtlan* and of the town of *Cuauhnava*, and they fought with their feathered weapons and beneath their *escuahupiles* of quilted cotton, and the garments of feathers, some like lions and others like tigers, and others like birds, with their wide wooden sabres, like swords, and the blades were of flint that they might cut, and their bucklers of feathers and others with their bows and

[1] I am grateful to Miss Muller for the summary of her findings; see Appendix B, p. 453.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlán NU37

175
433

arrows, and others with their slings with which they threw very large stones and others with *maporros,* and others fought with weapons like pikes made of oaken staves, four-cornered, and those who were vassals wore only cloths of *nequen,* which is made from the maguey, and their wide breeches on their *verguilacos,* and the chieftain wore a cloth of white cotton, with his fine cloak, and he who wore such had to be a brave man, and if he were not known for such, they killed him straightway, and they wore nothing else, and the garment which they now wear is of cloth covered with painted stripes, each one according to his ability and opportunity, and their shirts of linen either of cotton of the land or of Ruan, and their *curaguelles* of linen and the stripes of the stuffs worked in feathers, and the same with the women who wear skirts and *guaypies* [outer garments] according to the possibilities of each, of colored cotton and feathers, and the foods that they used were what are used now such as *tamales,* and *tortillas,* and their chickens and venison and rabbit and their *chile;* this was the diet of the *principales* [nobles]; but the *maceguales* [commoners], [ate] tortillas, chile, and some rabbit, gruels, beans, *chian* and other vegetables which they had to eat, which are same as they have now, and the quail and doves were kept as greatly prized food for their idol, and demon, and formerly they lived a much longer time and died very old, and when three or four died, they considered it a great pestilence and did not allow them to be buried, but burned them and winnowed their ashes in the air; they say that the reason why there was no pestilence, and why they now live a short time and many, many die regularly, what is understood to be the reason is that at that time they went naked, and slept on the ground, and bathed twice each day, and lived in health, and now they go about in shirts, and sleep in beds, with bedclothes, and when the air strikes them they fall ill and die and they do not understand that the cause can be any other.

. . . they say that outside of the oaks, pines and cedars which there are in the forest in quantity, that the most notable tree which they have is the maguey, for the many benefits which they have from it, such as making cloths with which they dress themselves, leaves and aloes for stewing black honey, and another which they drink when half cooked, and of it before cooking they make *pulque;* when the pulpy leaves whence all this comes are dried, it serves as firewood, and if a shoot which comes forth in the middle is allowed to grow, it serves as a beam, they make shoes, *alpargates,* and the said juice is very healing for new and old wounds, and of great power, and the points of the leaves, because they are very hard and sharp, serve as nails for many things; likewise they have another tree in this town which they call *amaquapite* which is the tree of the paper used by the natives, which they get from the bark of the said tree, boiled, and afterward they wash it and pound it with stone clubs, on boards, and thus they make it.

. . . they say that the fruit trees of Castile do not grow in this town, except the lime and the orange, and that very little, because it does not grow, and although they have tried to plant the quince, pomegranate, peach, pear and apple, and that there have only grown the guava-trees, and aguacates, and the *cacahualsuchal,* which is a tree like the *calan,* of which they make bouquets to present, and *yolosuchil* which is a heart-shaped flower which smells sweet, and trees of *yzquisuchil* which are little white flowers, very little ones which smell sweet, and others which have white flowers, red ones and yellow ones, which smell sweet, which they call *calosuche,* which in Spanish means flower of the crow; it is like the rose-bay of Spain.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

. . . that the garden seeds with which they ordinarily have sustained themselves and are sustaining themselves, are: corn, beans, chile, yams, and potatoes and *chian*, which is a very small grain like mustard, of which they make a gruel, and calabashes and *guahucoyoite*, which is wild amaranth, and another fruit which they call *chayotes* which are like the prickly hulls of chestnuts, except that they are larger and entirely edible; there grow also cabbages, lettuce, beets, onions, garlic, parsley, coriander, beans, chick-peas, except that they do not grow except in the garden of the church.

. . . they said they have a plant which is called *tamalcoco* and the root of which, drunk in wine, is good for the urine, taken with other herbs, they have another herb which is called *quahuchichiguale* the branch of which is good for them when they have fevers, given it to drink; they have also another herb which is called *hipatle*, the bark of which is good to give to drink to one who is spitting blood; they have another herb which is called *matlasuchil*, the root of which is good when given to drink for spotted fever; they likewise have another herb which is called *tlatlalote* of which the roots are very small, drunk when one has a chill, before they have fever, in a little wine or water, they sweat with it and vomit it again and then they are bled; they have another herb which is called *tlalococitlapili* whose root is also good for the urine; they have likewise another plant which is called *tlalchichiptatli* whose root is good when given to drink for indigestion; they have likewise another plant which is called *tlatlaveapatli* the root of which drunk with *matlasuchil* and others is good for the spotted fever; many other herbs with other names are for the same purposes.

. . . they say that they have only seen that there are small lions, and wolves and coyotes which are like foxes and *ocotochite* which they say are like foxes and tigers they have not seen, and that the said animals do no harm except to the little dogs, and that of the animals of Spain there are none, except pigs and dogs, although they already had small dogs before and there are many fowls of the country, and domestic and wild cocks, and black pheasants in the forest, and that the fowls of Castile came from Spain, and that the manner of raising them is as in Castile, the ones as well as the others, except that those of the country are very tedious to raise because they are more delicate.

. . . they say that there are no salt pits in this town nor in its district, and that they furnish themselves with salt from the city of Mexico and from Chiautla and Piastla, which are thirteen or fourteen leagues from this town, and they lack nothing of the things to eat, except cows and sheep.

. . . the houses of this town are of stone and mud, and others of mud brick, small and square, and of bad appearance in the dwelling, because the rooms are opposed one to another, and all are covered with flat roofs whitewashed with lime, for there is much of it in this town and its district; there is *texontle* which is a red stone which is ground for mortar to make it very strong, even though they do not use it except for large buildings and churches.

. . . their principal industries, which they had formerly, were paper and lime, and that they paid tribute in stuffs that they made, and that now all have horses and bring fruit from one place to another, and paper, lime, and other merchandise which they carry on

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

115
433

some market-days for others, from which they live, and that at present they pay the tribute in corn and money, accordingly as they are appraised.

. . . there is no hospital for Spaniards nor any other seminary, except a hospital for the Indians which the town itself built to cure its sick.[5]

A study of sixteenth-century archive materials on Tepoztlán reveals that some of the pre-Hispanic industries mentioned in the above document, such as the manufacture of paper and cotton cloth, lasted for some time after the Conquest. In fact, the evidence suggests that rather than decline, the native industries may have expanded for a short time in response to the market provided by the Spaniards. Thus, a document dated March 2, 1551, containing a report on local conditions and submitted by an agent of the Marquesado del Valle reads as follows, ". . . the said Indians collect much chile, beans, corn, cotton, melons and *xicamas*. . . ." Also, they have and make a great deal of paper, all of which they sell at excessive prices, dealing with Spaniards and with other Indian merchandise dealers."[3] Two other references indicate the continuation of the paper industry after the Conquest. One is found in the work of the great naturalist, Francisco Hernández, who visited Tepoztlán about 1575 and reported that Tepoztlán swarmed with workmen making paper.[4]

The other is a document dated February 4, 1591, which reports Tepoztecan complaints to the authorities to the effect that the cattle were damaging the trees from which they made paper.[5] This is the latest reference to papermaking in Tepoztlán that we found.

[248] Cotton growing, which is mentioned in many documents during the sixteenth

[5] *Relación*, pp. 243-48.

[6] *Hospital de Jesús*, Leg. 289, Exp. 100.

[4] Francisco Hernández, *Historia de las Plantas de Nueva España*, I (México, D.F.: Imprenta Universitaria), 249. In discussing the *amoxcahuitl* (paper tree), he writes as follows:

"Nace en los montes de Tepoztlán, donde se mira hormiguear de obreros que fabrican de este árbol un papel no muy a propósito para escribir o trazar líneas, aunque no deja pasar la tinta a su través, pero propio para envolverse y muy adecuado y útil entre estos indios occidentales para celebrar las fiestas de los dioses, confeccionar las vestiduras sagradas, y para adornos funerarios. Se cortan solo las ramas tiernas de los árboles, para dejar que los renuevos se endurezcan; se maceran con agua y se dejan remojar durante la noche en los arroyos o ríos. Al día siguiente, se les arranca la corteza, y después de limpiarla de la cubierta exterior, se extiende a golpes con una piedra plana pero surcada de algunas estrías, y que se sujeta con una vara de membrillo sin pulir doblada en círculo a manera de mango. Cede aquella madera flexible; se corta luego en trozos que, golpeados de nuevo con otra piedra mas plana, se unen fácilmente entre sí y se allanan; se dividen por último en hojas de dos palmos de largo y palmo y medio aproximadamente de ancho, que imitan nuestro papel mas grueso y corriente, pero son más compactas y más blancas, aunque muy inferiores a nuestro papel más terso."

Tepoztlán was probably one of the most important sources of paper for the Aztecs. This opinion is given by Hans Lenz and Federico Gómez de Orozco in their study, *La Industria Papelera de México* (México: Editorial Cultura, 1940). They point out that Tepoztlán was one of the 26 towns which, according to the Codex Mendocino, paid in taxes 16,000 *resmas* of paper annually to Moctezuma.

[3] *Indios*, Vol. 5, Exp. 181.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

century, persisted in Tepoztlán almost until the Revolution. A reference to cotton growing in Tepoztlán is found as late as 1890 in one of the best early geographies of the state of Morelos.[6] Furthermore, some of my older informants remember having seen cotton plants grown in the late eighties and were able to give detailed descriptions of the plants and the way in which they were used.[7] Weaving went out at about the time cotton did.[8]

Another pre-Hispanic industry which has now practically disappeared is that of pulque making. According to old legends, pulque was invented in or near Tepoztlán, and Tepoztecans were famous for their celebrations and debauchery. In the ancient Codex Magliabecchiano manuscript at Florence there is a reference to Tepoztlán, as follows:

> They celebrated another feast called Pilauana, which means intoxication in children, because during the said feast the boys would dance with the girls and they would mutually give each other drink until they became intoxicated . . . these Indians being already nine to ten years old.[9]

Referring to the figure of Tepoztecatl or Ometochtli it says:

> This is the figure of a great debauch that a village which calls itself Tepuztlán had as a rite, and when an Indian died from intoxication, the others in the village had a great dance bearing hatchets, made of copper in their hands. This village is near Yautepec, a dependence of the Marquesado del Valle.[10]

The importance of the maguey plant in pre-Hispanic Tepoztlán can further be judged by Hernández' description of its uses.

> It furnished the people with fire and fence wood, with gutters, tiles and thatching material, paper, and fibres from which shoes and cloth are made. They gather nails and needles from it, as well as fruits, wine, honey, sugar and vinegar.[11]

Other references to the Tepoztecan economy during the sixteenth century deal primarily with taxation and the operation of the *repartimiento* system. As one of the four villas of the Marquesado del Valle, Tepoztlán was an important source of labor supply for the neighboring haciendas. There are frequent references to Tepoztecan men being called upon to labor in the haciendas. During the latter part of the sixteenth century, Tepoztecans were assessed at the rate of four per

---

[6] Alfonso Luis Velasco, *Geografía y Estadística*, Bk. VIII.

[7] Cotton (*ichkatl* in Náhuatl) was planted on the edges of the cornfields so that it would not cut down corn production. The cotton seeds were toasted and eaten. Only the poorest families planted cotton and wove it into cloth. The cotton plant was opened and the cotton picked and then beaten to make it fluffy in preparation for spinning. Cotton cloth in Tepoztlán was called *tlazopili*. Náhuatl terms used to describe the various processes are as follows:

ixchawitepitl—to beat the cotton with sticks.
tlapochina—to loosen the cotton before spinning.
matzana—to spin thread.

[8] Redfield reported two looms in Tepoztlán in 1926-27.

[9] Miguel Salinas, "La Sierra de Tepoztlán," *Memorias y Revista de la Sociedad Científica*, Vol. XXXVIII, Nos. 9 and 10 (July, 1920).

[10] *Ibid.*

[11] This is an abstract of Hernández given by J. J. Valentini, in his article on "Mexican Paper," *Proceedings of the American Antiquarian Society*, N.S., I (1880–81), 69.

2;Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175
433

cent of the total number of taxpaying inhabitants of the town at the last census. That is, they were to send four men each week for every one hundred taxpayers.[12] In 1590 they were assessed sixty-three Indians to be given as follows:

"To the Ingenio de Amanelco, 37 Indians; to the Marquesado, 7; to Guastepeque, 10; to Guequepan, 5; to Contador Cassano, 5. . . ." [13] All of these localities were within the present state of Morelos.

Tepoztecans repeatedly complained against excessive demands for labor. A document dated June 20, 1590, reads as follows:

. . . the *maceguales* of the village of Tepuztlán have explained to me how they are vexed by the governor and principals of the above mentioned village, who demand, against every reason, 224 Indians, which are sent to different places. In behalf of their own interests and being tired of so many annoyances they beg me that they be assessed at the rate of four out of every hundred. . . ."[14]

Tepoztecans were also sent to work in the mines, a practice against which they complained bitterly.

The nobles and prominents have complained that it was very hard for them to send the 14 Indians that had to work in the Taxco mines because these mines were too far away and it took six days to make the round trip. They ask that instead they be sent to the sugar plantation of the Marqués del Valle which is nearer and that in their place 14 Indians from Yautepec which is closer to the mines be sent there.[15]

The document goes on to say that the Corregidor of Cuernavaca investigated the complaint, found it just, and

. . . ordered the division of labor in the mines between the villas of Tepuztlan and Yautepec. 14 Indians from Tepuztlan were to go to the mines during six months in a year, beginning on Jan. 1, 1591. The other six months, the 14 Indians were to be sent from Yautepec. The six months that the Tepuztecans did not go to the mines they were to work in the sugar fields of the Marqués del Valle.[16]

Despite all the Tepoztecan protests, we find that as late as 1699 they were still sending some men to the mines of Taxco and complaining about it. In 1695 a royal decree had been passed reducing the number to four men a year. However, the local authorities did not advise the inhabitants of the order, but instead levied a special tax on the pretext that those who paid the tax would not have to go to Taxco. The tax was, of course, pocketed by the officials.[17]

It appears that in addition to the regular yearly assessment, Tepoztecans were also called upon to work on haciendas in emergencies. Thus when a neighboring *hacendado*, Diego Cavallero, who had rented a plantation from Cortés, ran short of Negro slaves during harvest of the sugar cane, Tepoztlán was ordered to supply

---

[12] *Indios*, Vol. 4, Exp. 911.
[13] *Ibid.*
[14] *Ibid.*, Exp. 728.
[15] *Ibid.*, Exp. 127.
[16] *Ibid.* See also Vol. 6, Exp. 417. This document tells of Tepoztecan deaths in the Taxco mines as a result of which they were henceforth to work only on nearby sugar plantations.
[17] See *Hospital de Jesús*, Leg. 312, Exp. 9.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

"400 common Indians . . . to be taken to said Diego Cavallero . . . for what remains of this year and the coming year of 1600 only. . . ." [18]

What these frequent demands upon Tepoztecan labor supply did to the local economy can only be conjectured. It seems probable that it acted as a disruptive factor and may have contributed to the breakdown of local industries.

Indian complaints to the crown against mistreatment in the mines sometimes led to action in their behalf. A document of 1603 tells of an order from the Audiencia Real which suspended the sending of Indians from Tepoztlán to Cuautla because of "the grievances and mistreatment which his lordship learned were being inflicted upon the Indians." [19]

In addition to work on haciendas and in mines, Tepoztecans were also required to work on construction projects in Cuernavaca, the construction of the church in Tepoztlán, and as domestic servants for the *principales* of the village. According to the law, Tepoztecans were to receive payment for such work, but judging from the many Tepoztecan complaints against failure to be paid, the law was not always followed. This and other points can be seen from the following excerpts which suggest, among other things, that the church and the hacienda owners worked hand in hand in the exploitation of Indian labor.

The Count of Curuños, by order of His Excellency Martín López de Guana, orders in turn to the *alcalde* of Tepuztlan, D. Lorenzo Juárez de Mendoza, the following:

. . . . That the Indians and residents of Tepuztlan have complained to him, that the governor and some of the well-known persons of the villa oblige them to send Indians to work for their household and do personal things. They added that unnecessary numbers of people were compelled to go to work in the repairing being done in the Church of Santo Domingo [barrio of Tepoztlán]. They assured that less people could do the work and added that most of the ones who were asked to work in the Church were sent instead to the sugar plantations of D. Bernardino del Castillo Tlaltenango, where excesses were committed with them. They ask that not so many people should be sent to work because, due to the high mortality rate of the previous year, there are now very few people left in the town. . . ." [20]

Large numbers of Tepoztecans worked on construction projects in Cuernavaca for Cortés. The following reference is one of many of this type in my possession:

It is hereby made known to the Corregidor of the Villa of Cuernavaca, that the governor and *regidores* of the villa of Tepoztlán, and 555 commoners worked for a month and a half in burning limekilns to prepare lime for use in the repair of houses of the Marqués del Valle, each Indian working two days; in addition 879 artisans, carpenters, bricklayers and lime makers worked, some working eight days, others ten and twelve days and longer depending upon the hurry of the job . . . and that they were never paid for their work and the said *macegnales* were aggrieved. . . ." [21]

---

[18] Archivo General de la Nación, México, General de Parte V, 64v-65, quoted in Zavala, *Fuentes para la Historia*, Bk. I, pp. 308-09. This document also refers to an order of the King requiring the *hacendado* to buy Negro slaves to replace the Indians.

[19] *Ibid.*, Bk. V, pp. 94-95.

[20] *Indios*, Vol. 2, Exp. 103.

[21] *Ibid.*, Vol. 4, Exp. 410.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175 433 This complaint was investigated and it was determined that "the 1,800 *peones* who were occupied deserve one-half *real* each, and the 90 *oficiales* (artisans) one and a half *reales* each."[22] However, five months had elapsed since the first complaint and the Tepoztecans had not yet been paid.

In addition to levies on Tepoztecan manpower by the *repartimiento* system, Tepoztlán was also subject to taxation. In the years before the Conquest, Tepoztlán paid tribute to Moctezuma in the form of cotton mantles, cloth, paper, and corn. It is difficult to determine the amount of tribute paid in each item because our main source of information, the *Matrícula de Tributos*, lists Tepoztlán along with 25 other towns which apparently constituted a single administrative unit under Moctezuma. However, some idea of the kind of tributes collected can be seen from this document.

The tribute of the province of Huaxtepec of which Tepoztlán formed a part is given in the Codex Mendocino as follows:[23]

Clothing

400 bundles of loin cloths
400 bundles of women's clothing
1,400 bundles of large mantles of "twisted" cloth
8,000 bundles of rich little mantles
46 warriors' costumes with shields (6 being fine pieces)

Food

4 large wooden cribs (1 each of maize, beans, *chian*, and *huauhtli*)

Other Goods

2,000 polished pottery dishes of various colors
8,000 reams of native paper.[24]

In the early years after the Conquest, Cortés apparently followed the Aztec policy of collecting taxes in produce. However, shortly after the Marquesado del Valle was established we find Tepoztecans complaining against making payments in kind and asking that they be allowed to pay in currency. These data are especially important, for they suggest that by the latter half of the sixteenth century Tepoztlán was already beginning to function as a money economy. [436]

[22] *Ibid.*, Exp. 962.

[23] The tribute list as given is taken from R. H. Barlow, "The Extent of the Empire of the Culhua Mexica," *Ibero-Americana*, XXVIII (1949), 81. I cannot agree with Barlow when he decides to consider Tepoztlán as belonging to the administrative district of Chalco rather than Huaxtepec. (*Ibid.*, p. 74.) This is admittedly a guess on his part, since Tepoztlán also appears in the list of villages belonging to Huaxtepec. There is fairly conclusive evidence from other sources to show that Tepoztlán belonged to Huaxtepec. The *Relación* specifically deals with this point, as do other early sixteenth-century documents from the *Archivo de Indias* and the *Hospital de Jesús*. Nevertheless, this matter reflects the marginal position of Tepoztlán to the three native administrative districts prior to the Spanish Conquest, namely, Chalco, Cuernavaca, and Huaxtepec. This appears clearly from an examination of these districts as shown by Barlow's maps of the Empire of the Culhua Mexica, printed in the work cited.

[24] Lenz and Gómez de Orozco, *La Industria Papelera*, suggest that most of the paper came from Tepoztlán.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

One of the reasons some Tepoztecans preferred money payments over payments in kind was that there were landless individuals who had to purchase corn at exorbitant prices to pay their taxes. This is seen in the following document addressed to the *corregidor* of Cuernavaca by the Audiencia:

. . . . The *maceguales* of the village of Tepoztlan have reported to me that many of them, due to the lack of arable land, do not work the ten *brazos* of seed [land] which belongs to the community, and by agreement with the governor and *alcaldes* they pay each year in money the value of 10 *almudes* of corn because they cannot pay in kind, which causes them a great deal of harm, because the price of grain changes from one year to another, and the valuation is made by the governor and mayors, who to profit themselves do this without regard to the common hurt; and that the hurt is so great that they can afford it no longer; and they requested that the tax in corn be changed to money, since they have no lands; and that each Indian be allowed to pay 2 *reales de plata* yearly as is done in other places where there is no corn harvest. . . .[26]

Later documents indicate that this was allowed, and that taxes were collected in both goods and money. In 1552 an agent of the Marqués del Valle, who visited Tepoztlán to investigate complaints against high taxes, reported back that it would be in the interest of both the Marqués and the Crown if Tepoztecans were forced to pay in cotton cloth as they had done earlier under Moctezuma. He reports that Tepoztecans were taking advantage of the great scarcity of cotton cloth and were charging exorbitant prices for it.[26]

In 1567 Tepoztlán was taxed by the Audiencia Real of New Spain "each year 2,718 pesos and one *tomín* of common gold . . . and in addition 1,327½ fanegas of corn to be paid at harvest time."[27] In 1569 they were taxed 2,655 pesos and 1,327 fanegas of corn.[28] According to one document the Marqués del Valle obtained 2,418 fanegas of corn from the Tepoztecan harvest of 1567 and 1568, and 1,095 fanegas from the harvest of 1569.[29] He then sold this corn at the price of "cinco tomines de Tepuzque la fanega," to one Miguel Rodríguez de Acevedo, who had rented the nearby "ingenio de Taltenango" from Cortés for a period of nine years beginning in 1567.[30]

A document of 1580 gives us a clearer picture of the taxation system in the village and municipio.[31] Taxes were collected for three purposes: as payment to the Crown; to help support the local officials of the municipio; and to support the church and the village fiestas. The over-all rate of taxation for heads of families was one fanega of corn per taxpayer, and the rate for Indian women, widowed or single, was one *tomín* each. A total of 1,460 fanegas of corn was collected from Tepoztlán and the surrounding six villages. A fanega was the equivalent of 48 *cuartillos*.[32] This item

[26] *Indios*, Vol. 4, Exp. 565.
[27] *Hospital de Jesús*, Leg. 289, Exp. 100.
[28] Francisco del Paso y Troncoso, ed. *Epistolario de Nueva España*, XI (Mexico: 1505–1818), 27.
[29] *Ibid.*
[30] It appears that Cortés took this corn as part payment of the assessment.
[31] *Ibid.*, p. 36.
[32] *Indios*, Vol. 1, Exp. 252. This document is given in its entirety in Appendix C, p. 455.
[33] This means that corn sold for three centavos per *cuartillo* in 1579.

2;Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175
433

is important as one of the very few instances of corn production figures for Tepoztlán during the sixteenth century. The 1,460 fanegas of corn collected would be the present-day equivalent of about 730 *cargas*, or approximately 3,759 bushels.[33]

Each fanega of corn was worth one and one-half pesos. This corn was collected at the rate of one fanega per head of family. In addition, there were 63 women, widowed or single, located in the outlying towns, who paid one *tomín* each; and 250 women, widowed or single, located in Tepoztlán proper, who paid .86 *tomín* each.

The community treasury received 498 pesos and 6 *tomines*, which went to the Crown for taxes. This sum was raised by taking the 40 pesos and 4 *tomines* paid by the single or widowed Indian women, adding to it the proceeds from the sale of enough corn to equal 2 *tomines* per taxpayer for the six small villages, and selling 253 additional fanegas of corn from the amount taken from Tepoztlán proper. To the municipio went 372 fanegas for payment to local officials and clergy; 60 fanegas went to pay officials of outlying villages; and 649 fanegas were left to the towns for festivals, church expenses, and visiting priests.

The document takes up each of the outlying villages: Santiago, San Juan, Santa Catalina, and San Andrés, and explains what has been paid and how it is to be divided and used. Using this as a basis I have inferred certain figures which were not given and have arrived at estimates for each village and for the municipio as a whole.

I have assumed five as the average size of a family. This is somewhat higher than figures used by other scholars. Mendizábal [34] used 3.2 in his population estimates, and more recently Cook and Simpson used 4.[35] However, the total population derived from my figures is not unduly high because I did not count the children of widows or widowers. Were I to follow the procedure of Cook and Simpson I would have to add the 313 Indian women, widowed or single, to the 1,460 taxpayers giving a total of 1,773 taxpayers, which would make for a total population of 7,392 as compared to my estimate of 7,613.

Table 16 shows the corn collected and sold and the population estimates. All figures for the outlying villages except those under "Corn Collected" were given in the document. However, in the case of Tepoztlán proper, only the figures under "Indian Women" and "Men Taxpayers" were given in the document.

To illustrate how the figures for Table 16 were derived from the document, we will use the village of Santiago as an illustration. The village had to contribute 20 pesos and 3 *tomines* to the community treasury. This amount was to be collected from 15 Indian women, widowed or single, at the rate of one *tomín* each. The other

[33] For colonial weights and measures, see Manuel Carrera S. Tampa, "The Evolution of Weights and Measures in New Spain," *Hispanic American Historical Review*, Vol. 29, No. 1 (Feb., 1949), pp. 12-24.

[34] Miguel Othón de Mendizábal, "La Demografía Mexicana," *Obras Completas*, Bk. III (1946), pp. 309-35.

[35] Cook and Simpson, "The Population of Central Mexico," *Ibero-Americana*, Vol. XXXI (1948), p. 5.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

18½ pesos were to be collected from 74 taxpayers at the rate of two *tomines* each. These 148 *tomines* were secured by selling 12½ fanegas of corn at 1½ pesos a fanega; and after selling this amount there were 61½ fanegas left. All these figures were given in the document. To get the figures for the total population, we multiplied 74 x 5 (the figure I assumed as the average size of a family) which equals

175
433

TABLE 16. First Distribution of Corn, 1580.

Village	Indian Women (Widowed or Single)	Men Tax-Payers or Heads of Families	Total Population	Corn (Fanegas)			Total Paid to Community Treasury	
				Collected	Sold	Held	Pesos	*Tomines*
Santiago	15	74	385	74	12½	61½	20	3
Santa María Magdalena	16	93	481	93	15½	77½	25	2
Santo Domingo	8	45	233	45	7½	37½	12	3
San Juan	6	34	176	34	6	28	9	2
Santa Catalina	8	46	238	46	8	38	12	4
San Andrés	10	45	235	45	7½	37½	12	4
Tepoztlán	250	1,123	5,865	1,123	253	801	406	3
Total	313	1,460	7,613	1,460	310	1,081	498	6

370, and to this we added the 15 Indian women to arrive at the total population of 385.

Following is the list of officials and the amount of corn which they received. (See Table 17.) This list includes only the officials of Tepoztlán proper; all of the 372 fanegas of corn, which was divided among them, came from the 801 fanegas which they had left after the first distribution shown in Table 16. Of the 82 people listed in Table 17 only five were not officials, namely, Doña María Cortés and four "Sons of ex-prominents." This leaves 77 officials for Tepoztlán proper.

In the last section of the document the viceroy directs the final distribution of the corn that remains. This is shown in Table 18. The document also indicates an additional three officials for each of the outlying towns. This brings the total number of persons supported at least partially by taxation to 85, and the total number of officials to eighty. Here then, we see that Tepoztlán supported a much larger bureaucracy in 1580 than in 1943. This will be considered in more detail later. In this last section of the document the amount of corn left for the real needs of the villages is also indicated. This corn was used to pay for feasts, priests who visited the town, celebrations, and so forth.

TEPOZTECAN ECONOMY DURING THE DÍAZ REGIME

One of the curious and unfortunate aspects of the historical record for Tepoztlán is the wide gap in our information between the end of the sixteenth century and the latter part of the nineteenth century. We know little of what happened in the

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175
433

TABLE 17. Distribution of Corn to Officials, 1580.

Officials		Corn (Fanegas)	
Title	Number	Amount to Each	Total
Governor	1	30	30
Alcaldes	2	10	20
Regidores	6	6	36
Mayordomos	2	6	12
Escribientes	2	6	12
Church *fiscal*	1	10	10
Singers of the church	20	2	40
Alguaciles of the fields	6	5	30
The great *alguacil* of the capital	1	6	6
Daughter of Don Hipólito *cacique*, Doña María Cortés	1	12	12
Sons of ex-prominents	4	5	20
Tequitlatos of the capital	10	4	40
Tequitlatos of barrio of Atenco	8	4	32
Tequitlatos of barrio of Teycapan	10	4	40
Tequitlatos of barrio of Olac	5	4	20
Alguacil of barrio of Pochitlán	1	4	4
Tequitlatos of barrio of Pochitlán	2	4	8
Total	82		372

village during this two-hundred-year period, our data being limited to some references to epidemics in the early nineteenth century, the foundation of schools about 1820, the loss of church lands after 1857, and the participation of Tepoztecans in

TABLE 18. Final Distribution of Corn, 1580.

Villages	Corn (Fanegas)		
	On Hand After First Payments	Final Payments	On Hand After Final Payments
Santiago	61½	15	46½
Santa María Magdalena	77½	15	62½
Santo Domingo	37½	7	30½
San Juan	28	7½	20½
Santa Catalina	38	7½	30½
San Andrés	37½	7½	30
Tepoztlán	801	372	429
Total	1,081	431½	649½

the "War of the Plateros" in the sixties. However, it is possible to reconstruct some aspects of the economic life of the village during the later part of the Díaz regime on the basis of informants who lived through that period and have vivid memories

21Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

of what happened. Some data are also contained in regional geographies of the area published in the late nineties.

The impressions of life in Tepoztlán during the Díaz regime given to us by informants vary considerably. Some informants, particularly those who come from leading families, paint a picture of peace and prosperity similar to that recorded by Redfield. Other informants, primarily those who were poor and landless, give a picture of suffering and exploitation both by the surrounding haciendas and the local *caciques*. Let us examine two samples of informants' versions of life in the village at the turn of the century. The first version is that of a poor *tlacololero*, age 54, who is landless, who worked as a *peón* on many haciendas prior to the Revolution, and who has since held minor positions in the local government.

There was much more hunger about 1900 than at present. The majority of the population was very poor. The presidents of the municipio, in agreement with the *caciques*, forbade the sowing of *tlacolol* and so the poor had no way of helping themselves. This prohibition was due to the fact that if the poor planted *tlacolol*, the rich or *caciques* would not have *peones* during the rainy season to seed their lands.

The poor did not plant because they owned no lands. On the other hand, the *caciques* had much land. Among the *caciques* there were the following persons: Vicente Ortega, Pedro Ortega, Pedro Demesa, Demetrio Rojas, Donaciano Navarrete, Pedro Lara, Vicente Zúñiga, José María Martínez, Valentín Ortiz, Pedro Quiros, and Mariano Patiño—practically all of them belonged to the barrio of La Santísima.

The wealthy hired oxen and *peones* but there was always an excess of people. They paid the oxen driver 25 centavos a day, and the *peones* 18 centavos a day.

Corn sold at 3 centavos per *cuartillo*, but since work was scarce there was hardly anything to eat, and often it was necessary to subsist on grass, mushroom fungus, and *quelites*. During the months of January and February hunger increased, and then the poor had to go to one of the rich and offer to work during the rainy season; and if he were accepted, he asked his future "boss," for an advance of a *tercio de maíz*, for example, which would be deducted from the wages he would later earn. The deduction was made on the basis of 50 per cent of the daily wage; they amortized half the debt, and the other half was paid in cash to the *peón*. The very poor, pressed by necessity, were forced to pawn their sons, for a sum which varied between 5 and 10 pesos. The *empeñados* (pawned children) worked in the house of the *rico* carrying water, wood, guarding the cattle, and performing other domestic duties.

Domestic servants earned a salary of 1½ pesos a month, and had to grind corn, wash, and cook.

When some poor man did not want to pay the debt he had contracted with his *patrón*, the latter went to the municipal authorities and they placed the debtor in jail as *insolvente*.

The debt which oppressed the poor families was so heavy a burden that one never stopped paying, and debts were passed from father to sons.

The salaries of *peones* began to rise as a result of the competition offered to the wealthy of Tepoztlán by the haciendas. The haciendas sought many laborers and offered better salaries. The rich were not able to prohibit the *peones* from leaving for the haciendas as they had done in the case of *tlacolol;* they were thus obliged, much against their will, to raise salaries. Here is an approximate comparison of the salaries in those days.

2;Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175
433

Wages	
Caciques	*Haciendas*
18 centavos	2 *reales y medio* or 3 *reales* or 37 centavos
3 *reales*	1 *tostón*
1 *tostón*	5 *reales* or 62 centavos
1 *tostón*	5 *reales y medio*
5 *reales*	6 *reales* or 75 centavos

It was customary to beat the *peones* who worked on the haciendas. The men charged with recruiting labor for the haciendas were known as *capitanes*. They always carried a "chicote de cuero crudo," about two meters in length; the foreman had a sheaf of long machetes. Both officials were responsible for beating the *peones*. They did not permit interruptions—when a *peón* tried to rest awhile he was given a lashing.

The *peones* did not protest when the overseers beat them. All were humiliated or cowed, for if they dared protest they were drafted into the army as common soldiers.

When the Revolution finally approached, they first began to show manifestations of discontent against the primitive regime of the haciendas. Thus, for example, I participated in a collective protest which occurred against one of the overseers. I was working at the hacienda of Temixco, whose owners and high ranking employees were all *gachupines* (Spaniards). The routine of work was as follows: work began at 5:00 A.M. and ended at 6:00 P.M.; at noon there was an hour to eat. All the Tepoztecans had to eat cold tortillas which were sent all the way from Tepoztlán. Once they decided to light a small fire to warm the tortillas. They used some twigs to hold the tortillas over the fire. It happened to be the custom to call these twigs "*gachupines*." The one-fourth hour they were allowed for breakfast was not long enough, and so one of the foremen arrived on horseback in front of the group of Tepoztecans around the fire and ordered them to stand and get to work, for the others were already at work. Tepoztecans explained why they were delayed, but the overseer did not listen and urged his horse onto the fire and the meal. Then the Tepoztecans picked up some stones and ran him off. Later they got up and went to the cashier to ask for their pay, for they no longer wanted to work on the hacienda. Then the *patrón* arrived and when he learned of what had transpired, he decided the workers were right, and he beat the overseer and stripped him of his authority. As a result of this incident the workers were convinced that the time had come to demand energetically the end of these abuses.

When the revolutionary uprisings finally began, the overseers and labor recruiters became more and more fearful and hesitated to mistreat anyone.

As to political freedom in the village, there was absolutely none; the *cacique*, Vicente Ortega, was the one who ruled, and all who rebelled he ordered imprisoned, banished, or sent to the army.

The *caciques* named the municipal authorities among themselves; they had no free elections such as there are now.[88]

Other informants gave more emphasis to the positive aspects of life under the Díaz regime. It should be noted that when an informant was told the versions of

[88] This informant worked in the following haciendas: Atlihuayan, San Carlos, San Gaspar, Temixco, and Cinconcuac; in Temixco they gave him a blow with a cudgel which knocked him out for quite a while; and in the other haciendas he was frequently beaten.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

other informants, he usually agreed that many of the abuses mentioned had existed.

The second version is a summary and condensation of the account of an informant, age 67, who is a member of a small landholding family and who was very active in village politics during the Revolution and in the early twenties. He was also active in the religious life of the village and is a man of more than average ability and intelligence.

Life was good in the time of Porfirio Díaz. Everything was cheap. Corn sold for three centavos per *cuartillo*. A cup of alcohol cost one centavo; a kilo of sugar, ten centavos; a pack of cigarettes, three centavos; a meter of cloth, only fifteen centavos. It is true that wages were low. The daily wage was 25 centavos but was rising during the years immediately preceding the Revolution and had gone up to fifty centavos. The thing that was truly scarce was work. And so during the difficult times from January to May and from August to September, the stronger among us went to work on the sugar plantations of Oacalco, San Carlos, Atlihuayan, San Vicente, Temixco, and others of the many that were in the state of Morelos. The owners of these plantations were *gachupines*, and they mistreated the Indians, kicking and insulting them. These plantations also robbed the nearby villages of their lands. This is what happened to Tepoztlán. We lost some of our best lands.

The rich here had their lands and produced good crops, but the poor had no land. The poor ate chile and salt and some beans. Meat was had once a month at best. Animals were slaughtered in the local slaughterhouse only once every four days, but even at this rate all the meat could not be sold. Milk was used by only the rich. Most of the villagers lived on pure tortilla, squash seeds, and acacia pods. Clothing was almost entirely of cotton, and huaraches were made of crude leather. Huaraches were made in Tepoztlán, as were sombreros. There were surrounding plantations which at that time were more isolated from the cities than now. There were three tanning shops in the village and there was a saddlery shop which made harnesses, saddles, machete sheaths, and pistols, items which were used by the local *cacique* families.

The local government was in the hands of *caciques*. Vicente Ortega held power for many years, with the support of the state authorities among whom he had ties of *compadrazgo*. There were no political parties or opposition groups allowed. Ortega was good and kind to those who were good and was bad to those who were bad. Those were the times of order and respect for authority. Punishments were severe. Anyone who opposed his rule might be sent to prison in Quintana Roo. This happened a few times. A vigorous village guard made the rounds each night. Everyone was to be off the streets after dark, but in any case even a woman walking alone in the streets would be safe. Stealing was rare as was other crime, for the people feared the severe punishments.

Ortega looked out for the welfare of the villagers. When there was a shortage of corn he always knew where to get it and did. It is true that sometimes he sold it at rather high prices, but it was better to have it than not at all. He was also good, for when someone had a death in the family he would lend him money. He had many *peones* work his lands and paid them 18 centavos a day. He demanded that his *peones* work for him all through the agricultural season. If they arrived late at work he would scold them and oblige them to catch up with those who had arrived early. Sometimes he might go as far as to beat them.

The construction of the railroad by the Wells Fargo Company at the turn of the

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

175
433

century led to bitter anti-American sentiment. Vicente Ortega, the leading *cacique* in the village, was accused of personally pocketing the funds received by the local government from the railroad for the privilege of cutting a road through the municipio lines. After repeated complaints to the state authorities, an investigation was held and Ortega resigned his position and was succeeded by a triumvirate of three other Tepoztecans.

It should be noted that there was much more public work done in the village during the Díaz regime than later. The present municipal building and park were constructed at that time. The leading streets in the village were lighted by *farolas*, and some of the funds obtained from the railroad was used to pipe water into the village. It was at this time also that Tepoztlán started its local museum, and its newspapers were published in Aztec and Spanish. This was indeed a time of cultural florescence for the village, even though it was limited to the better-to-do families.

In the preceding pages I have attempted to reconstruct some aspects of Tepoztecan economics before the Conquest, in the early colonial period, and during the later part of the Díaz regime. In summary it can be said that the pre-Hispanic economy was a varied one, for in addition to corn production, there were a number of important local industries such as cotton growing, weaving, the manufacture of paper, and the intensive use of the maguey plant for a variety of purposes. While there is no way of knowing the relative importance of each of these industries, it is interesting to note that corn and beans constituted only a relatively small part of the semi-annual tribute paid to Moctezuma by the district of which Tepoztlán formed a part.

After the Conquest we find that most of Tepoztecan taxes were paid in corn or its money equivalent. These data suggest that the Conquest had the effect of making Tepoztlán more and more dependent upon its corn, for the other industries soon disappeared. It would also seem probable that a greater land area was planted in corn after the Conquest in order to meet the new conditions, and that corn production probably increased as a consequence of the introduction of plow agriculture. This, in turn, has resulted in progressive exhaustion of Tepoztecan lands, so that at present the lands on which plow culture is practiced are among the least productive in the municipio and their corn yields compare unfavorably with the communal hillside lands on which hoe culture is practiced.

Our historical survey also shows that the Conquest was a disruptive influence on local industries, and also led to a marked decline in population. (See p. 29.) It also suggests that the land problem in Tepoztlán dates back at least to the mid-sixteenth century, at which time there were already landless people in Tepoztlán. Another point established by the documents is that Tepoztlán very early became subject to a money economy, with all that this implies for the development of a commercial spirit.

The essential facts which emerge from several informants' accounts of the Díaz regime are as follows: (1) a large portion of the population was landless and not

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

175
433

permitted to utilize the communal lands; (2) most of these landless people worked on nearby sugar plantations; (3) the economic and political life of the village was dominated by the *caciques* or political bosses imposed by the state government; (4) prices were low and the cost of living much cheaper than at present: and (5) class differences were much more marked than at present.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

423 [511] The *ejido* program in Tepoztlán has meant that 267 families, who were formerly landless, now have some land. However, the size of landholdings is too small to support Tepoztecan peasants according to their own standards. That the *ejido* has not really solved the land problem is of course due in part to the small amount of land that could be distributed, for Tepoztlán is surrounded on three sides by municipios which have their own communal lands. The *ejido* program has also [578] had disruptive effects in the village in that it has created two distinct interest [665] groups, the *ejidatarios* and the *tlacololeros*. Furthermore, taking the control of the [631] communal lands away from the local municipal authorities has eliminated a source [652] of municipal revenue, and thereby weakened local government and initiative. At the same time, it has increased centralism and made the municipio even more dependent upon the outside.

311 185 [648] The deforestation occurring in the municipio and the refusal of Tepoztecans to abide by the regulation of the forestry department point up an important problem of more than local scope. Much has been written about the superstitious and backward Mexican peasant who opposes progress and sticks to his ancient way of life. Too frequently the specific reasons which lead to resistance to change are not sufficiently understood.

[432] The case of Tepoztlán is typical. The livelihood of hundreds of Tepoztecan families depends upon hillside hoe culture and charcoal burning, two activities which by their very nature destroy forest resources and bring about soil erosion. Many Tepoztecans are aware that the forest resources are their greatest wealth and that failure to conserve them may lead to eventual ruin. But they are caught on the horns of the dilemma of a rapidly rising population and limited natural resources. It is no less than absurd to expect peasants to abide by rules which would deprive them of their food supply. In the light of the Tepoztecan material, it would seem essential that national programs of forest and soil conservation be carefully synchronized with other programs which will give the people alternative sources of income, if they are to give up hillside hoe culture and charcoal burning.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

241
[133]

Fig. 22. Land used in plow culture, in the broad valley bottom of the municipio.

the rocky wooded area of the volcanic *texcal;*[2] in plow culture the land is less sloping, less rocky, relatively treeless, and includes the broad valley bottom in the southern part of the municipio. *Tlacolol* is practiced on communally owned land and necessitates a great deal of time and labor but very little capital. Plow culture is practiced on privately owned land[3] and requires relatively little time and labor but considerable capital. In the former, there is a dependence almost exclusively upon family labor; in the latter, there is a greater dependence upon hired labor. In *tlacolol*, the yields are much greater per *cuartillo* of seed planted than in plow culture, but the amount of corn planted by each family is relatively little and never reaches the amount planted by a few of the larger operators in plow culture. In *tlacolol*, rotation

[133]
242

[2] Tepoztecans use the word *cerros* to refer both to the spectacular, butte-like rock outcropping which surrounds the village and to the steep slopes covered with scrub forest. *Texcal* refers to land covered with the relatively recent volcanic flow which supports a thorny scrub forest with a predominating flora of copal gum, mimosa-like legumes, a true "sweet potato," and silk cotton trees. *Texcal* covers a strip of land approximately two kilometers wide on the western limits of the municipio, and constitutes about ten per cent of the total land area of the municipio.

[3] Lands recovered from the Hacienda of Oacalco by the municipio in 1930 represent an exception to the rule. Here we find communally owned lands divided into *ejido* plots and worked with plow and oxen.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

291
293
482
492

Fig. 23. Tepoztecans, returning home from work.

241

is practiced by necessity, for the fields cease to produce after the first few years; in plow culture, the same fields may be planted year after year until the soil is completely exhausted. [242]

Tlacolol is essentially geared to production for subsistence, while plow culture is better geared to production for the market. It is significant that most families who work *tlacolol* are landless and that *tlacolol* has traditionally been viewed as the last resort of the poor. However, farmers who own small plots of land may also work some *tlacolol* to supplement their meager income. Indeed, in the past few years a new trend is occurring in the village because of inflation. Tepoztecans who own considerable private land now rent it out or let it rest, and themselves work in *tlacolol*. This is resented by most *tlacololeros*, who believe that the communal lands should serve the landless. The attitude of the *tlacololeros* is better understood in the light of the fact that the communal lands are becoming exhausted and can no longer support the present-day population. [433] [735] [178] [427] [678]

Other differences between *tlacolol* and plow culture include the cycles of work, the tools, the type of corn, the work techniques, and even the terminology. Gen-

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

243 weeded field of one hectare. Whenever possible the weeds are plowed under to improve the fertility of the soil. The steel plow is used in the *barbecho*, and the land is plowed in one continuous furrow to make a concentric rectangular form.

If the field is large, it may be divided into two or three parts, each of which is plowed in the same fashion. The land is always plowed at right angles to the direction in which the rows of corn are to be planted, so that the rows can be kept straight. Tepoztecans pride themselves on having straight rows of corn, and farmers [461] will compete with one another to see who can plow the straightest. One man with a single team of oxen can plow on an average of about two *cuartillos* a day. If time permits, two *barbechos* will be given; the second is always done soon after the first rains, toward the end of May or early in June.

In the case of *los tres arados* which is used in preparing a field that has been in cultivation the previous year,[7] the steel plow is also used, and the plowing follows the old corn beds and furrows. The plow is placed just to the right of the old cornstalks, and the earth is turned to the right. This is called the *primer arado* (first plowing). When the oxen reach the end of the furrow they are turned, and the same process is followed on the adjoining corn bed, so that a new mound of earth is formed where the furrow was before. This is called the *segundo arado* (second plowing). In both the first and second plowing a short yoke is used, and [492] the oxen walk in the furrows on either side of the corn bed. The plow driver walks to the left of the bed, holds the plow with his right hand, and directs the oxen with his left. The *tercer arado* (third plowing) goes through the center of the corn bed. The third plowing forms part of the process of planting.

243 *Planting:* This generally begins a few days after the ground has been plowed, preferably when the earth is humid. But it is important to note that in Tepoztlán 221 there is a great deal of leeway in the time of planting. A few days or even a few weeks make very little difference in the net results. Corn can be planted any time between June 1 and July 25 with a fairly good chance of getting a crop. Tepoztecans, [461] therefore, follow no rigid work cycle. Of approximately four hundred farmers who may plant corn with plow and oxen in any one year, no more than a third begin their work immediately after the first rains. The reasons for this are varied. Many own neither land nor oxen and may be delayed in making arrangements for renting, in preparing their tools, plows, and yokes; others may still be busy selling wood and charcoal; still others may be delayed by illness or death in the family. It is a common sight in Tepoztlán to see corn at various stages of growth during the rainy season.

243 The selection of seed for planting is generally done soon after the harvest in January, when the finest ears of corn are set aside to be shelled later in May or 242 June, just before planting. Three types of corn are used in plow culture, *ancho*

[433] [461]

[7] Some use the *barbecho* on land that has been cultivated the year before, and then follow with *los tres arados*. This gives a better yield but involves at least three additional days of work for a plot of twenty *cuartillos* or approximately two hectares. Only the best farmers, about ten per cent, do this.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepostlan NU37

251
343

Fig. 28. The *cuexcomatl* for storing corn.

243
825
231

magical qualities associated with the boa constrictor, for it was believed that a man who had tamed one would always have a good yield in his milpa, and that the seed would not be subject to insects.

YIELD

243
433

The yield of corn varies a great deal from field to field and from year to year on the same field. Table 30 shows something of this range for specific fields of varying size.

TABLE 30. Estimates of Corn Yields in Plow Culture, 1944.

Size of Milpa (Amount of Seed Planted in *Cuevillos*)	Yield in Ears of Corn by *Cargo*	Yield in Shelled Corn by *Cargo*
14.0	30.0	20.0
22.0	34.0	23.0
8.0	15.0	10.0
6.0	7.5	5.0
7.5	13.5	9.0
10.0	7.5	5.0
12.0	9.0	6.0

Judging from these figures, we would get an average production of 9.6 *cargas* of shelled corn a hectare. However, it is possible to arrive at a much more useful

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

estimate if we follow Tepoztecan classifications: First-class land will produce on an average of two *cargas* of ears of corn for every *cuartillo* of seed planted; second-class land will produce on an average of one *carga* for each *cuartillo* of seed; and third-class land will produce about one-half a *carga*. Thus productivity of the best land is about four times that of the poorest land.

Most Tepoztecans do not use fertilizer in their fields. They are apparently aware of its benefits but, because of the shortage of manure and the expense of commercial fertilizer, are unable to use it.

A few Tepoztecan farmers have attempted to divert seasonal streams, which come down from the mountain forests to their fields, to capture some of the rich humus of the forest, and the results have been spectacular. Portions of fields which received this humus more than tripled their production. There are unfortunately few such streams, and even if all were diverted in this fashion, they would help only a few farmers.

PRODUCTION TIME AND COST

An analysis of production time in plow culture is extremely difficult, because Tepoztecan peasants keep no records and because of the large number of variables to be considered. The following account, based upon careful observation of a few cases and extended interviews with many farmers, is presented with an awareness of some shortcomings on our part.

There is considerable range in the amount of man-days of work that goes into the clearing, planting, cultivation, and harvest of a cornfield. The most important variables are the nature of the terrain, the quality of the soil, the speed of the oxen and the workers, the type of seed used, etc. Judging from our data, the total number of man-days of work needed for the production of one hectare of corn ranges from about 35 to 65 days, depending upon the variables previously mentioned.

If we were to consider 50 man-days of work as an average we would not be far wrong. Actually, however, there are only about 35 days spent working a field of one hectare by any one man. Most men work as day laborers in the fields of others, so that on the average a man puts in about 50 work days in plow culture from the beginning of June to the end of December. However, this estimate does not include many days spent by the farmer in guarding his field against cattle and trespassers.

In Table 31 we present a study of the time spent in the production of corn in a milpa of ten *cuartillos*. In this case we have participated in and carefully observed each of the operations listed. In addition we have obtained estimates of production time from many informants, and some of these are given in Table 32.

It will be seen from these tables that the greatest amount of time is spent in cultivating and harvesting the corn. The preparation of the fields and the planting take relatively little time. The fact that farmers spend a relatively small part of the year at their major occupation gives them a great deal of time for other economic activities, as well as enforced leisure.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

TABLE 31. Time Spent in Production of Corn in Plow Culture on Sample Plot, 1944.

Operation	Plot of Ten *Cuerdas*		
	No. of Workers	No. of Days Worked	No. of Man-Days
Clearing of land (*limpia*)	1	3.0	3.0
Plowing (*barbecho*)	1	5.0	5.0
Plowing (*surcado*)	1	1.4	1.4
Seeding (*siembra*)	2	1.4	1.4
First cultivation (*primer manu*)	2	3.0	6.0
Second cultivation (*segundo manu*)	2	2.0	4.0
Third cultivation and hilling (*rajda o despacho*)	2	1.0	2.0
Weeding (*zulada*)	1	2.0	2.0
Stripping cornstalks (*zacatco*)	1	6.0	6.0
Tying leaves in bundles (*juntado*)	1	1.0	1.0
Transport leaves (*acarreo*)	1	3.0	3.0
Corn picking (*pizca*)	1	5.0	5.0
Corn transport (*acarreo mazorca*)	1	3.0	3.0
Corn shelling (*desgranado*)	1	5.0	5.0
Total			47.8

The question of estimating costs of production is difficult because Tepoztecans, like most Mexican peasants, do not keep accounts of their expenses, and more important, do not estimate their own labor in terms of its monetary value. They are, however, quite familiar with the value of a day's work in money, since they all hire labor at one time or another, or themselves work for a wage. Tepoztecan farmers are also apt to speak of "time lost" when they are called upon to serve on village guard duty, or if they have to go to court over some legal matter.

Despite the fact that labor time is not so evaluated locally, we have assigned money value to the labor of the farmer-operator to arrive at some notion of relative production costs. In estimating total production costs we have considered the prevailing daily wage of hired labor and the cost of hiring oxen as the two most important items of cost. Our estimates, although approximations, illustrate the wide range in production costs for a single hectare of corn, and the relative cost of each operation. Variations in production costs are due to such factors as differences in

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

243
●433
461

[p.196]

TABLE 32. Estimate of Time Spent in Production of Corn in Plow Culture in Four Sample Plots, 1944.

Operation	Plot I (12 *Cuartillos*)		Plot II (10 *Cuartillos*)		Plot III (10 *Cuartillos*)		Plot IV (10 *Cuartillos*)	
	No. of Workers	No. of Man-Days	No. of Workers	No. of Man-Days	No. of Workers	No. of Man-Days	No. of Workers	No. of Man-Days
Clearing of land	1	4.0	1	6.0	1	3	2	2
Plowing	1	6.0	1	4.0	1	4	2	2
Total		10.0		10.0		7		4
Planting	1	2.0	1	1.5	1	2	1	1
Seeding	1	2.0	1	1.5	1	2	2	2
Total		4.0		3.0		4		3
First cultivation	2	8.0	2	4.0	2	6	2	2
Second cultivation	1	4.0	2	8.0	1	3	2	2
Third cultivation	1	1.5	1	2.0	1	1	1	1
Weeding	1	3.0	4	4.0	1	1	2	2
Total		16.5		18.0		11		7
Stripping cornstalks	12	12.0	10	10.0	1	5	4	4
Tying leaves in bundles	1	1.0	1	1.0	1	1	1	1
Transport of leaves	1	6.0	1	6.0	1	4	6	6
Corn picking	4	8.0	7	7.0	7	7	4	4
Corn transport	1	3.0	1	6.0	1	3	4	4
Corn shelling	1	6.0	1	7.0	1	3	1	3
Total		36.0		37.0		23		22
Total		66.5		68.0		45		36

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

slope of field, quality of soil, rockiness of terrain, amount and stubbornness of the weeds, speed of the oxen and workers, and distance from the village. 243 433

We have gathered production cost estimates from twenty-five farmers and found considerable variation among them. In Table 33 we present three cases to illustrate the variation of cost of each operation and the range of total costs.

TABLE 33. Estimated Cost of Production of Corn in Plow Culture in Three Sample Plots, 1944.

Operation	Plot I (12 *Cuartillos*)	Plot II (12 *Cuartillos*)	Plot III (12 *Cuartillos*)		
	Value in Pesos	Value in Pesos	Cost of Hired Labor	Value of Own Labor	Total Value
Clearing of land	8.00	7.50	3.00		3.00
Plowing	30.00	15.00		10.00	10.00
Total	38.00	22.50			13.00
Plowing	10.00	8.00		5.00	5.00
Seeding	4.00	4.00	4.00		4.00
Cost of seed	3.60	4.80		3.00	3.00
Total	17.60	16.80			12.00
First cultivation	36.00	16.00	4.00	10.00	14.00
Second cultivation	28.00	12.00	4.00	10.00	14.00
Third cultivation	7.00	7.50	2.00	5.00	7.00
Weeding	6.00	2.50	4.00		4.00
Total	77.00	38.00			39.00
Stripping cornstalks	24.00	15.00		8.00	8.00
Tying of leaves	2.00	3.00			
Transport of leaves	18.00	6.00		12.00	12.00
Corn picking	16.00	12.50	8.00		8.00
Corn transport	9.00	9.00		8.00	8.00
Corn shelling	12.00	10.00		11.50	11.50
Food and drink for peons	10.00	12.00			12.00
Total	91.00	67.50			59.50
Total cost	223.60	144.80			123.50
Amount and value of corn	7 *cargas* 210.00	6 *cargas* 182.00	5 *cargas*		125.00
Amount and value of fodder	12 *cargas* 48.00	12 *cargas* 36.00	8 *cargas*		32.00
Net profit	34.40	73.20			33.50

The production costs in these cases vary as much as 100 pesos and range from 123.50 to 223.60 pesos. The most expensive and most extended operation is harvesting. Harvesting is generally done under a certain amount of pressure, because of the need to be through when others in the same enclosure let in their animals to

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

pasture. For this reason, many farmers hire several peons at this time, involving an outlay of cash. At least one peon is often hired during the plowing and seeding and the first cultivation. Farmers not owning oxen and plows must rent them.

The cost of production does not always have relation to the amount of corn produced, because some fields require more work than others. In the specific cases given in Table 33 the larger production was offset by higher costs (about 32 pesos per *carga* in Plot I) and conversely, the plot which required least outlay in cash or labor yielded the least corn (about 24 pesos per *carga* in Plots II and III). Differences in cash value of the corn produced are due to the changes in market price. Those who are forced to sell immediately after the harvest receive lower prices than those who hold on.

HOE CULTURE

The land used for *tlacolol* (hoe culture) is of two distinct types, located in different areas of the municipio. One type is known as *texcal*, which is covered with black volcanic rock and a semi-deciduous scrub forest in which the leaves fall and rot during the dry season and make a rich but thin topsoil in little pockets among the rocks. The other type of land is known as *cerros*, and refers to the mountainsides. Most of the *cerros* used for *tlacolol* are of lime rockbeds with many rock outcroppings and scrub forests, but of a somewhat different nature than in the *texcal*. Both types of land are at some distance from Tepoztlán, so that the farmers who work this land must spend approximately two hours each way in going and returning from work.

The use of the communal lands for *tlacolol* is a fairly recent phenomenon in spite of the fact that Tepoztlán has had its communal lands since pre-Conquest times. Before the Revolution of 1910-20 during the Díaz regime, the well-to-do *caciques* who controlled the political life of the municipio forcibly prohibited the use of the communal lands for *tlacolol*. As we have indicated earlier, their primary motive was to assure themselves of a labor supply for their own lands. One of the principal changes in the economic life of the village brought about by the Revolution was to deprive the *caciques* of their power and to return to the people the right to use their communal lands. But in the years immediately following the Revolution, that is between 1920 and 1927, relatively few individuals became *tlacololeros*. The population of the village was still small and there was a relative abundance of rentable land because of the absence of many families from the village.

In 1927 the municipio lost control of the *tlacolol* lands, which passed to the jurisdiction of the forestry department. At this time Tepoztecans lost their right to work *tlacolol* because the forestry department, as part of its national program of conservation and prevention of soil erosion, forbade the indiscriminate cutting and burning of trees—an integral part of the process of preparing *tlacolol* land for cultivation. With the rapid increase of population in the thirties, the shortage of land became acute and the need for the *tlacolol* land urgent. Many individuals began to open *tlacolol* plots illegally and were fined.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

off at intervals all night to frighten away the rodents who have been getting after the corn. It is believed that a good fireworks session will keep them away for as long as two weeks.

Harvest: The harvest procedures are very similar to that of plow culture, except that most *tlacololeros* do not transport the fodder because the distances are too long, and it is considered uneconomical. Also most *tlacololeros* are poor and do not own a horse or burro and must hire them.

YIELD

Corn yields in newly cleared *tlacolol* fields are high, much higher than yields in plow culture. A normal yield on a newly cleared plot of *tlacolol* is about two *cargas* for each *cuartillo* of corn planted, and even three *cargas* are not unusual. But the yields decrease very markedly the second year, and most milpas are then abandoned for a new clearing because of the exhaustion of the slight top humus. The yields in *tlacolol of texcal* are somewhat higher than those in the *cerros*.

PRODUCTION TIME AND COST

An estimation of the time required in the production of corn in *tlacolol* must take into consideration both the *texcal* and the *cerro* plantings because of the variations within each. Table 36 compares the approximate number of man-days spent on each operation in both types of *tlacolol*.

TABLE 36. Estimated Time Spent in Production of Corn in *Tlacolol*, 1944.

Operation	Man-Days Spent in *Tlacolol* Clearing	
	Texcal (10 *Cuartillos*)	*Cerro* (7 *Cuartillos*)
Clearing with machete and ax	40	21
Fencing with poles	12	20
Burning	8	1
Seeding with *coas*	12	7
Reseeding	4	2
Weeding by hand	30	40
Repairing fence	—	40
	12	8
Transporting corn	10	15
Shelling corn (15 *cargas*)	15	7
Total	143	161

Despite the fact that our sample from the *cerro tlacolol* is a smaller plot, it took thirty-eight days to work it. Taking into consideration differences in the size of

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

both plots, the most obvious difference in production time is in clearing and fencing the land. Due to the rougher terrain, clearing and burning in *texcal* are more difficult and time-consuming than in *cerros*. On the other hand, because of the greater threat from grazing cattle, the building and repairing of fences are more time-consuming in the *cerros*.

Estimated costs of production based upon the same two plots clearly demonstrate the wide range in costs which prevails in Tepoztlán. (See Table 37.)

TABLE 37. Estimated Cost of Production of Corn in *Tlacolol*, 1944.

Operation	Pesos Spent in *Tlacolol* Clearing					
	Texcal (10 *Cuartillos*)			*Cerro* (7 *Cuartillos*)		
	Hired Labor	Own Labor	Total	Hired Labor	Own Labor	Total
Clearing with machete and ax		60.00	60.00		31.50	31.50
Fencing with poles		18.00	18.00	17.50	17.50	35.00
Burning		12.00	12.00		1.50	1.50
Seeding with *coxale*		18.00	18.00		10.50	10.50
Reseeding		3.00	3.00		3.00	3.00
Seed			3.00			2.10
Seed for reseeding			.40			.20
Weeding by hand		54.00	54.00	21.00	60.00	81.00
Repairing fence					39.00	39.00
Harvesting		18.00	18.00		12.00	12.00
Transporting corn	15.00		15.00	22.50		22.50
Shelling corn		22.50	22.50		13.50	13.50
Total	15.00	205.50	223.90	61.00	188.50	251.80
Amount and value of corn produced	15 *cargas* at 30.00 each		450.00	9 *cargas* at 30.00 each		270.00
Total cost and value			223.90			251.80
Net profit			226.10			18.20

The lower yields and higher costs of producing corn in the *cerro tlacolol* as compared with the *texcal tlacolol* make the *cerro* less economical to work, and it is also more time-consuming. But since the families who work *tlacolol* are for the most part subsistence farmers, our comparisons of the relative profits involved in each type are strictly for purposes of analysis.

PLOW AND HOE CULTURE COMPARED

Now that we have examined both plow and hoe culture, as they are carried on in Tepoztlán, let us compare the two systems in some of their more important characteristics. We have seen that there are more families engaged in plow culture than in *tlacolol*, and that there is overlapping in that some families participate in both systems. The distribution of the families who work private holdings, *ejido*

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlán NU37

holdings, and *tlacolol* is approximately as follows: 36 per cent of all families operate private land; 31 per cent operate *ejido* parcels; and 20.9 per cent operate *tlacolol*. Since both *ejido* and private parcels employ plow culture, it is evident that the *tlacololeros* constitute by far the smallest group. Hoe culture is secondary in importance to plow culture from the point of view of the number of families engaged in each. This is seen even more clearly when we recall that all but 96 of the *tlacolero* families had an *ejido* parcel, a private milpa, or both. However, *tlacolol* is still very important in the total economy of the village.

One of the most striking differences between the two systems is the much greater amount of time necessary in hoe culture. It will be seen from Table 38 that it takes approximately two-thirds more man-days to produce one hectare of corn in *tlacolol* than it does in plow culture. As we have seen, the single job of weeding by hand takes more time than all three cultivations with plow. The great difference in the total time spent in preparation of the land is also noteworthy. The somewhat longer time period for harvesting and transport is due to the greater distances of *tlacolol* fields from the village and the larger relative production of the *tlacolol* milpas. It should be noted that fencing the *tlacolol*, which is so time-consuming, has to be repeated each time a new *tlacolol* is opened—in contrast with the permanent stone fences of private milpas and *ejidos*.

TABLE 38. Comparison of Time Spent in Production of Corn in Plow and Hoe Culture.

Operation	Man-Days Spent on Plot of One Hectare	
	Plow Culture	Hoe Culture (*Texcal*)
Preparation of the land	8.0	60
Planting	2.8	16
Cultivation	14.0	30
Harvest	15.0	12
Transporting corn	3.0	10
Shelling Corn	5.0	13
Total	47.8	141

In addition to the differences in the actual time spent there is a corresponding difference in the nature of the work. Tepoztecans who have worked in both types consider work in *tlacolol* infinitely more exhausting than work in plow culture. The *tlacololeros* are in a sense perpetual pioneers who are always making new clearings in the forest. Also, weeding by hand is very difficult and leaves welts for days on the hands of the toughest *tlacololero*. It is said in the village that a *tlacololero* is known by his hands.

Another very important point is the difference in time pressure demanded by each system of agriculture. On the whole there is much less time pressure in *tlacolol*. A man can clear his land anytime between January and April. He can work for a few days at clearing, spend a few days doing some other job, and then return to

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

clearing. After planting there is also considerable leeway before the first and only weeding. This is not the case in plow culture. Although there is considerable leeway in the time of planting, once planting has been done, the cultivations must follow soon after at regular intervals or the yields will be cut appreciably. Furthermore, there is need to take advantage of dry days when the oxen can get into the field.

The differences between the work cycles of the two systems are shown in Chart 2.

CHART 2. Comparison of Work Cycles in Plow and Hoe Culture, 1944.

PLOW CULTURE	MONTH	HOE CULTURE
	JANUARY	Clear land with machete and ax.
	FEBRUARY	
No work in fields.	MARCH	No work.
	APRIL	Burning brush. Fencing, seeding.
Clearing land, plowing and seeding.	MAY	
	JUNE	Reseeding.
First cultivation.	JULY	
Second cultivation. Third cultivation.	AUGUST	Weeding.
Visits to field.	SEPTEMBER	
Weeding.	OCTOBER	Visits to field.
Stripping corn stalks.	NOVEMBER	
Harvesting and transporting corn.	DECEMBER	Harvesting and transporting corn.

It will be seen that the agricultural year begins at different times in each case. The *tlacololeros* begin work very soon after the harvest and work through the larger part of the dry season, while the farmers of plow culture let their land rest, except for a relatively few farmers who plow new land in January or March. The fact that different farm families in the same village are engaged in different activities during the same season of the year adds to the complexity of village life. Here again, the picture of homogeneity in activities which is so often associated with so-called folk cultures has to be modified. Most *tlacololeros* are through planting before planting begins in plow culture, and many accept work as peons in plow culture. However, during late July and early August, the peak labor season for plow culture finds *tlacololeros* busy in their own fields. Similarly, harvest comes at the same time in both systems and it is at this time that there is a labor shortage in the village. Many Tepoztecans have described this overlapping of work cycles as a conflict of interests between *tlacololeros* and milpa owners, for the latter are unable to get sufficient hired help.

A comparison of the yields of the two types of agriculture reveals that hoe culture yields are equal to the best yields in plow culture and are generally about twice as high as the average yields of plow culture. These larger yields make hoe

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

culture quite attractive. One might ask therefore why more people do not work *tlacolol*. There are a number of reasons. First, the difficulty of the work discourages many, and the fact that *tlacolol* has traditionally been viewed as work for the poor is also undoubtedly a factor. Second, many families who have worked as peons have no corn at the harvest and have to seek some cash income regularly to support their families. In other words, even in the case of *tlacolol* which takes so little capital a man must have corn to support his family if he is to spend the long periods of time necessary for clearing the scrub forest. Third, and by far the most important consideration, is the limited amount of *tlacolol* land; a shortage which is being felt more and more as the number of *tlacololeros* has increased. The *tlacolol* system of cutting and burning, by its very nature, demands large reserve areas; it takes about ten years for cleared land to grow back into scrub forest and be worth clearing again. If all the villagers were to open *tlacolol* clearings in a single year, there would be no possibility of planting in new clearings again for at least ten years.

The costs of hoe culture in terms of the value of man-days are much higher than in plow culture, but by the same token little hired labor is used. *Tlacolol* is practical only for people with a lot of time and little capital. It is much too inefficient a system for production for the market on a large scale. As we have seen in Table 37, there is considerable range in costs even in hoe culture. Most of this range in the cases cited is due to the difference between the two types of terrain used in hoe culture, that is, *cerro tlacolol* and *texcal tlacolol*. In the *cerro*, fencing is a much more time-consuming operation because there is more danger of cattle getting into the fields, but cattle rarely get into the *texcal*.

This brings us to one of the crucial problems in Tepoztlán, namely, the rapid increase of population with no accompanying increase in resources or improvement in production techniques. On the contrary, the increase in the number of *tlacololeros* represents a return to a more primitive type of production in an effort to escape the devastating effects of a money economy during a period of inflation. We have already noted the sharp rise in the cost of renting or buying a team of oxen as well as other tools of plow culture, and we have also noted that only about one-third of all landowners have their own oxen teams. Labor costs have also gone up, and indeed the wages paid to day laborers in Tepoztlán are considerably higher than in other parts of Mexico, perhaps because of the proximity of Tepoztlán to large urban centers. In any case these costs are beyond the capacity of many Tepoztecans, and they turn to *tlacolol*. *Tlacolol* has eased for many the shock of the rapid rise in prices. Although it is helping to resolve the immediate problem, it by no means offers a satisfactory solution. In fact, it increases the problems to be faced.

Were Tepoztlán a primitive culture with the usual high birth rate and high death rate, and stable and small population, the technique of *tlacolol*, though wasteful and inefficient, might be workable. But in the face of an ever-increasing population and higher standards of living, the primitive techniques of *tlacolol* no longer seem to be feasible. The necessity of clearing new plots of land every third year, the rapid depletion of the land and its forest resources, and the consequent danger of erosion are problems which will soon have to be reckoned with.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

with cattle brought in from Guerrero in the belief that the animal would forget its past home.

Milk products are used for medicinal purposes. Whey, cheese, and butter are used for skin rashes, and cheese is used as a poultice for snake bites. Some families use, as a purgative, milk in which a cow's tail has been soaked. Pig's fat is commonly used as a salve for inflammations.

CHARCOAL

The production of charcoal by the burning of oak and other woods is one of the most important sources of income for many Tepoztecan families, but primarily for the poor. Charcoal production demands very little capital and few tools; it utilizes the communal forest resources; it serves as a convenient source of income for the landless peasants and as a supplementary source of income for those engaged in agriculture. As a rule, charcoal production is carried on as a part-time activity by farmers during the slack season. But in the smaller barrios of San Pedro, Los Reyes, and San Sebastián, about fifteen individuals engage in charcoal production as a full-time occupation.

Charcoal production has risen and fallen at different times in recent Tepoztecan history. Charcoal production on a large scale began shortly after the Revolution, when Tepoztecans returned to the village from their enforced exile. Desperately poor and with all their animals killed off, they eagerly turned to charcoal as salvation. This development was encouraged and organized by a provisional president of the municipio, Jesús Monroy, who was imposed by the state authorities in 1919 shortly after peace was established in the village. Monroy called a meeting of Tepoztecans and organized workers into brigades of charcoal burners. As a result, a large portion of the forests of Tepoztlán was practically denuded, and there arose in the village a cleavage between those who wished to conserve the forest resources and those who cut the trees for charcoal.

During the late twenties, Tepoztlán organized a forestry cooperative, the first in the state of Morelos, and large-scale production began again. Conflict ensued and the cooperative ceased to exist in 1937. Since that time, charcoal production has continued on an individual basis. Data on charcoal production in the municipio are available for the years 1934–42. (See Table 41.) During this period 3,921,518 pounds of charcoal were produced. These figures are in all probability lower than the actual amount, for much charcoal is produced secretly in violation of federal forestry regulations.

The tools used in charcoal production are an ax, a shovel, a pickax, and a machete. Charcoal workers generally leave the village for the mountains in the early morning, going alone or in groups of two or three friends or relatives. It is not customary to hire workers in this occupation, because most workers want to come home at the end of the day, and charcoal burning necessitates staying out for a few days at a time. To make charcoal, oak and sometimes pine trees are felled, cut up into logs a few feet long, and piled upright to form a charcoal oven or

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

314 kiln. (See Fig. 31.) The kiln is then covered with earth on all sides, except for a small opening which is left for a draft of air to enter, so that the fire can be kept

Fig. 31. A charcoal kiln.

smouldering. The kiln is then lighted and allowed to smoulder for anywhere from 24 to 48 hours, depending upon the size of the wood pile. The worker must continuously be on the watch to prevent too much air from fanning the fire, and thus burning the wood rather than producing charcoal. So it is necessary for the charcoal burner to sleep out in the forest for one, two, or three nights.

314 The following estimate of the production time, cost, and yield was obtained 433 from a charcoal burner, and gives us some insight into the economics of this [461]

Table 41. Charcoal Production, 1934–1942.[a]

Years	Vegetable Carbon (in Kilos)
1934	1,209,430
1935	137,400
1936	264,500
1937	955,060
1938	475,400
1939	426,570
1940	—
1941	221,119
1942	232,039
Total	3,921,518

[474] [578]

[a] The sharp decline after 1934 reflects the falling off in production following the killing of the forestry cooperative leader, Juan Hidalgo. Slowly production increased until 1937, when the cooperative was disbanded. Since that time there has been a marked diminution in production.

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

occupation. The informant worked for ten days: three days in felling trees and cutting up the wood, one day in collecting the wood at one spot, one day in making the kiln, four days and nights in watching the kiln, and one day in taking off the dirt and putting the charcoal into sacks. The yield was 18 sacks or 9 *cargas* of charcoal. Each *carga* sold at 13 pesos, yielding 117 pesos. From this sum the informant had to pay 2 pesos a *carga* for transportation to Cuernavaca and 1½ pesos a *carga* for tax, totaling 31½ pesos, leaving him 85½ pesos for ten days' work. Since daily wages in agriculture at the time were about 4½ pesos, the income from charcoal is considered good in Tepoztlán. But charcoal burning is thought of as dirty work, and it ranks very low in prestige, being identified as a last occupational resort of the poor. Nevertheless, some well-to-do families in the outlying barrios spend part of their time in burning charcoal.

Until 1947, most of the charcoal in Tepoztlán was transported by burro to Yautepec. Since that time the bus line has agreed to transport charcoal, so that much of it now goes to Cuernavaca. The price of transport in 1948 was 2 pesos a *carga*. Occasionally a truck from Mexico City or Cuernavaca comes into Tepoztlán to transport charcoal.

CIRUELAS—HOG PLUMS

The *ciruela* is now an important cash crop in Tepoztlán, and according to informants it was introduced into Tepoztlán in 1865. There was little interest until it was discovered that the *ciruela* was pleasant to eat, and more trees were planted.

The *ciruela* can be easily propagated by cuttings. All that is necessary is to prepare a hole some 30 x 30 cms. wide and about 70 cms. deep and to place in it a branch from the mother tree—a branch 2 to 3 meters long and 5 to 10 cms. in diameter. The hole is then filled with soil and tightly packed. Cuttings may be made at any time of the year with good results. The only precaution necessary is to see that the cuttings are not disturbed while they are rooting, lest the young roots be broken. The trees begin producing in from 3 to 4 years, and production increases as the trees grow. Trees grow to a huge size. (See Fig. 32.)

Ciruelas first became a cash crop in Tepoztlán about 1901, or shortly after the railroad was built through the municipio. But transporting the *ciruelas*, by mule to the railroad and then by rail to Mexico City, incurred great expense and delay. Irregular train schedules often caused the fruit to spoil. After the highway was built, merchants from Mexico City and Cuernavaca sent their trucks to Tepoztlán during harvest, and the cash crop value of the *ciruelas*, transported in this way, increased. They are packed in wooden boxes known as *guacales*. Each *guacal* contains about nine gross of *ciruelas*. The price of a *guacal* in October, 1943, was six pesos. It is estimated that Tepoztlán exports about 7,000 *guacales* a year, a total crop value of about 42,000 pesos.

Prices are fixed by merchants from Cuernavaca and Mexico City. The merchants get together and decide among themselves what they will pay per gross for the fruit. Mexico City is the principal market.

2:Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

245 433 621

A survey of the numbers of *ciruela* trees in the village by barrio is shown in Table 42.

TABLE 42. Estimate of Number of *Ciruela* Trees, Average Yield, and Value of Harvest, 1944.

Barrio	No. of Trees	Average Yield per Tree in *Guscales*	No. of *Guscales*	Crop Value in Pesos
San Pedro	86	4	344	2,064
San Sebastián	127	4	508	3,048
Los Reyes	377	4	1,508	9,048
Santa Cruz (small)	153	4	612	3,672
Santa Cruz (large)	139	4	556	3,336
San Miguel	411	4	1,644	9,864
Santo Domingo	633	4	2,532	15,192
La Santísima	595	4	2,380	14,280
Tepoztlán	2,521			60,504

245 435

There has been a notable increase in the price of *ciruelas* since 1926, as can be seen from Table 43.

TABLE 43. *Ciruela* Prices, 1926–1943.

Year	Price per Gross, in Pesos [a]	
	Commercially Ripened	Tree Ripened [b]
1926	.12	
1927	.12	
1928	.13	
1929	.14	
1930	.15	
1931	.17	
1932	.20	
1933	.20	
1934	.23	
1935	.25	
1936	.25	
1937	.20	.30
1938	.20	.35
1939	.30	.40
1940	.30	.50
1941	.40	.60
1942	.50	.70
1943	.60	.80

[a] The average of the prices recorded during the harvest season for each year. Prices are highest at the beginning of the harvest and in the middle of August; they decline as the production increases until the end of the harvest, about the middle of November.

[b] Until 1937, nearly all tree-ripened *ciruelas* were used for home consumption and for hogs.

2;Lewis E-5 (1943-1948)1951 NU37 Tepoztlan NU37

443 178 [438] "raquítico," as the Tepoztecans would say. Furthermore, the quality of the local fruits and other goods is poor and, unlike other Mexican villages, little care is given to display. There is also little variety of goods, and it is difficult to predict what will be available from one market day to another. In short, the market at Tepoztlán shows symptoms of decline.

In addition to the market days, there are permanent stores in the plaza. As has been indicated earlier, their number has increased and they have spread to the outlying barrios. The stores sell most of the daily household necessities and have a [438] fairly stable clientele. Most sales are in small quantities because of the Tepoztecan [439] custom of running to the store once or twice a day. But Tepoztecans are going to Cuernavaca more and more, and are making larger purchases; this has been a [illegible] local tradesmen who cannot compete with the Cuernavaca stores and market.

[438] [452] Itinerant merchants who peddle through the village streets come with a wide variety of goods, such as blankets, *petates*, palm-bottomed chairs, sweets, and clothing. In recent years these merchants have introduced selling on the installment plan, and make collections on their rounds.

[437] [465] Goods are also circulated by barter between families, although this is declining. Corn may be exchanged for eggs or other food. Corn is still used as payment for wages or for the services of *curanderos*, especially when small sums are involved.

439 [433] Most Tepoztecan produce is sold outside the village, primarily in Cuernavaca. It is estimated that Tepoztecans sell approximately 1,000 *cargas* of corn per year. Many poor people complain that they have to go to Cuernavaca to purchase corn because none is available locally. Other Tepoztecan cash crops, charcoal and *ciruelas*, are also sold outside the village; charcoal goes to Yautepec and Cuernavaca, and *ciruelas* go to Cuernavaca and Mexico City.

[669] [177] Before the Revolution, Tepoztecans' trade relations spread over a wide area ranging from southern Jojutla, Guerrero, Ozumba in the Federal District, Puebla, Xochimilco, and Mexico City. Indigo was sold to Puebla, which, in turn, supplied dried fish. Merchants made frequent trips to Mexico City by foot, and the following account from an informant, aged 67, gives some idea of the role of the merchant and middleman in Tepoztlán before the Revolution.

[438] My father was a farmer, a butcher, and a tradesman. He worked his fields and slaughtered pigs which he sold to the neighboring villages of the municipio, but especially in San Andrés and Gabriel Mariaca. Later he would go to the southern part of the state of Morelos to buy up fruit and send it to Mexico City where he would live for a portion of the year to sell the fruit. He would leave Tepoztlán in April or May. He returned here in early June to plant and remained here in June, July, August, and September. At the end of September he returned to Mexico City until November. After All Saints' Day he would return for the harvest.

[484] My father went to Mexico City on foot, and the trip took all day. We would leave the village about 6:00 A.M., arrive at Xochimilco at 5:00 or 5:30 P.M. The route was as follows: first to San Juan, then to a rancho called Oshokiah, in the mountains; from Oshokiah to

2:Lewis E-5 (1943-1948) 1951 NU37 Tepoztlan NU37

But Tepoztecans have their own problems. Their agricultural resources are limited and of poor quality, their technology is backward, and their productivity low. Less than forty per cent are landowners, and holdings are much too small to support a higher standard of living. Moreover, there is no new land available, since the village is surrounded by other municipios with similar problems. It should be emphasized that, on the whole, Tepoztecans have a profound knowledge of their physical environment and have made as good an adjustment to it as might be expected. They are familiar with the advantages of crop rotation and practice it to the extent to which the size of their landholdings permit. They also know the benefits of letting land lie fallow, but again the majority of families do not have sufficient land to practice it. An ancient form of terracing is used to prevent soil erosion, but this is only partially effective, and erosion continues. Perhaps the most important improvement in agriculture would be the use of commercial fertilizer. Corn production could be doubled in many instances, but the high price of fertilizer makes this a difficult innovation. Irrigation and insect control would also be of great benefit to Tepoztlán.

The prospects of solving the agricultural problems through mechanization are slight. The rough and hilly terrain rules out the use of tractors and the very small size of holdings would make it uneconomical. In fact, even plow culture is becoming a burden because of the increased need of capital. As we have seen, some Tepoztecans are turning to the more primitive system of hillside hoe culture in order to avoid the rising costs of the recent inflationary period. But this system is an anachronism in the modern scene. It is further depleting the communal resources and cannot support an expanding population with a higher standard of living. Although the *ejido* program has helped to relieve the agrarian problem it has by no means solved it in Tepoztlán. It is difficult to see how the standard of living can be appreciably raised in such an environment. As the means of communication improve and the aspirations of the people rise, the move to the city will in all probability increase. That this has not occurred on a larger scale before this is an interesting commentary on the Tepoztecan character. Most of the young people are still quite provincial and fear the dangers of the outside world.

Given the objective limitation of Tepoztecan economy and environment, their history of colonial status over a three-hundred-year period, the instability and chicanery of Mexican politics, and the unplanned and haphazard nature of social change due to urban influence, we can better understand the psychology and world view of the Tepoztecans. It is a psychology of living with problems rather than solving them, of constantly adjusting to difficulties rather than eliminating them.[25]

We have seen that in the increased contact with the outside world in recent years, Tepoztecans have taken many new traits of modern life. They now have Coca-Cola, aspirin, radios, sewing machines, phonographs, poolrooms, flashlights, clocks,

[25] In a recent paper, discussing Indian and Ladino values, John Gillin has suggested that the drive to manipulate and control the environment was more characteristic of the Ladinos than of the Indians. Following this, Tepoztlán would appear to be more Indian.

3:Lewis E-5 (1943-1957) 1960
NU37 Tepoztlan NU37

177 fewer than thirty Tepoztecans were *braceros*—that is, temporary agricultural
464 workers in the United States; by 1957, over six hundred men had been *braceros*
167 for periods that varied from forty-five days to over a year. This occupational
[463] change has made for other great changes in the village. In 1943, Tepoztlán suffered from an acute land shortage. Now, because in many cases the *braceros* return to the village only to rest a few months before setting out for another period in the United States, it suffers from a shortage of manpower, and many
[433] *milpas* go unculivated. The *braceros* earn more in some months in the United
[434] States than they could earn in almost two years in the village, and many of them have invested their savings in improvements for their houses and in
[454] land and cattle. Many have brought home portable radios, mechanical toys,
[294] clothing, and cloth—the village now has four full-time tailors who are kept busy providing tailor-made pants for the villagers. Although the *bracero* move-
[186] ment has broadened the perspective of some Tepoztecans, who now greet American visitors with a few words of English, most of the *braceros* are isolated in work camps or on farms, speak no English, live on a Mexican diet, and on the whole learn little about the United States and its way of life. Very few learn agricultural skills that can be applied in the village.

[556] Most of the *braceros* from Tepoztlán are young men between the ages of twenty and thirty. They come predominantly from the upper segments of the lower economic group (Group I) but also from the middle group II (see p. 37). Few come from the poorest families and fewer from the wealthier families of Group III. This is an interesting change from the pattern in the early forties when only individuals with political connections and with experience outside of the village became *braceros*. At that time most Tepoztecans feared
[186] to leave the village for a distant country or even to go to the government recruiting stations for *braceros* in Mexico City. With more education, the younger generation developed a greater readiness to explore the outside world and to dare the hazards of a long journey. The sudden spurt in *bracerismo* did
[875] not occur, however, until a school teacher in one of the outlying villages became a *bracero* recruiter (locally called *coyote*). He had been a *bracero* himself and knew how to make the necessary legal arrangements. Tepoztecan men paid him a fee in the hope that he would get them longer contracts and also jobs in California rather than in Texas or Arkansas. The fees, which the *coyote* purportedly shared with government authorities, ranged from 200 to 400 pesos depending on the length of time of work specified in the contract. Most of the
[426] villagers who signed up had to borrow from local money lenders at the usual high rate of interest but they had avoided having to deal directly with the authorities and so had found the courage to take the initial step.

[433] [648] The *bracero* movement has served as a partial though temporary solution of the agrarian problem in the village. Tepoztlán has become dependent on the United States economy. Were the United States suddenly to close its borders to Mexican *braceros*, there would probably be a crisis both in the village and in the nation.

177 425 Another important change in Tepoztecans is their greater readiness to sell their land. In 1943, it was difficult to find anyone in the village who would consider selling a housesite or an agricultural plot. For example, in 1942 a

3:Lewis E-5 (1943-1957) 1960
NU37 Tepoztlan NU37

in attitudes and values and in the quality of interpersonal relations. It is too early to tell how deeply these changes have affected the ethos and character of the villagers, but all signs point in the direction of more profound changes to follow. In 1956, Tepoztecans seemed on the whole more outgoing and friendly and less bothered by the presence of outsiders. Children were noisier and smiled more; they were as apt to run toward as away from a stranger. Indeed, they begged tourists for centavos. Small groups of unchaperoned adolescent girls laughing and talking together were not unusual sights, and occasionally a village girl might be seen walking side by side with a boy in broad daylight. In general, the villagers were more accepting of their sophisticated members and provincialism seemed to be on the wane. There was more competition for jobs and scholarships and in general display.

That Tepoztecans have more drive and ambition for self-improvement is obvious. The young people are restless and have found the courage to leave the village to look for better opportunities. They are making greater demands on their parents for education, and they have more confidence in and more ability to cooperate with people outside the family over longer periods of time. Friendship not based on formal reciprocal relationships has become increasingly important; *compadrazgo* has assumed a new significance in providing connections and social advantages. Material success and a higher standard of living are consciously admired and worked for and the motivation to hide wealth is weaker. Respect has come to be based more and more on wealth and social status. Education imparts higher status; a young man or woman who has a teacher's certificate expects to be treated more respectfully by his or her elders. The middle class, especially, feel that status is also gained by discarding folk beliefs and practices and becoming more Catholic.

It is apparent, then, that Tepoztlán has made great strides ahead in the past fifteen years. The changes have been uneven, however, and not all the sectors of the population have equally benefited. Faced with limited agricultural resources, low yields, an absence of irrigation, and little prospect of solving their agricultural problems through mechanization, the villagers have by-passed their agrarian problem and have instead become dependent on new occupations and on jobs outside the village.

Most of the changes in the village are enjoyed by the middle economic group which even in 1943 had shown the most initiative and interest in raising its level of living. This group has doubled in size and now constitutes about 25 percent of the total population. Moreover, it is no longer merely an economic group; it is emerging rather as a true middle class, consisting of professionals, white-collar employees, and self-employed artisans and shopkeepers whose values and goals have come to differ substantially from those of the peasantry. The sharpening cleavage between the middle and lower economic groups, between peasant and nonpeasant, is perhaps the most far-reaching and significant change in the village.

Although the lower economic group is proportionately smaller than it was in 1943, it still constitutes the great majority of the villagers—approximately 65 percent. Our data suggest that this group has become even poorer, both because of inflation and because its members have been deprived of a tradi-